C

ISSUE C: **Is Bell Atlantic's method of computing a ratio to allocate the costs of non-incremental shared primary plant costs of the Dover Township integrated system reasonable and does it advance the Commission's video dialtone goals?**

Yes, Bell Atlantic's method of allocating non-incremental shared primary plant costs is a reasonable method that advances the Commission's video dialtone goals. Those goals include encouraging the deployment of video dialtone, thereby increasing competition in the video marketplace and enhancing the diversity of video services available to the public.[31] To realize those goals, the Commission must not require unreasonable cost allocators that would overallocate costs to a new service offering in a market dominated by an incumbent competitor. The result would be to substantially undercut video dialtone's ability to compete effectively with the cable industry. An allocator that ignores the market and causes prices for services to be set above the level that would maximize the contribution that Bell Atlantic would receive from the service is economically inefficient.[32]

Bell Atlantic is constructing a fully integrated network in Dover Township that will be capable of transporting a diverse range of narrowband and broadband services, including but not limited to video dialtone service.

The telephone network has evolved over time in response to the development of new technologies such as digital switching, new signaling technologies such as common channel

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[31] Video Dialtone Reconsideration Order, ¶ 1.

[32] *See* Taylor Direct Case Affidavit.

signaling, and new transmission media such as digital loops and fiber optics. The result has been an improvement in the quality and reliability of existing services, as well as introduction of a steady stream of new services. The upgrade to broadband capabilities is just the latest step in this continuing evolution and, like the prior steps in the process, will impact both existing and new services.

This process is not unlike the approach of a prudent business that upgrades its computer system, both to provide existing functions, such as word processing, more quickly and efficiently, and to provide new capabilities and functions to meet the anticipated future needs of the business. The business might not use all of such capabilities (e.g., random access memory or high-speed data transmission capability) today, but acquires these capabilities now because it anticipates using them in the next few years. For the same reasons, Bell Atlantic is now deploying facilities that will permit it to meet expected demand for both narrowband and broadband services of many types, including video dialtone, over a reasonable timeframe.

A significant amount of investment in a joint use, integrated network is appropriately characterized as shared investment, because it supports both voice and video services (as well as other existing and future services) and is not used exclusively by either. Bell Atlantic allocated to video dialtone service a portion of these shared investments based on the relative proportions of directly attributable voice and video costs.[33] Economists agree that, once incremental costs have been directly assigned on the basis of cost-causation, any method of assigning remaining common

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[33] Tariff, D&J, § 3.2.

or shared costs is inherently arbitrary.[34] However, Bell Atlantic's method of allocation is reasonable because it is based on the actual function performed by each network equipment component. Moreover, the Commission has approved use of this type of allocation methodology in other contexts.[35]

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[34] Taylor Reply Affidavit at ¶ 10.

[35] ***See, e.g.***, 47 C.F.R. §§ 36.151(c), 64.901.

ISSUE C- Information Request (par. 24-27):

C(1) We direct Bell Atlantic to provide the cost figures and calculations using an allocator based on the ratio of the sum of all dedicated and incremental costs of video dialtone service in Dover Township to the sum of all dedicated and incremental costs of telephony and video dialtone services in Dover Township. (These costs will have been provided by Bell Atlantic in response to Issues A and B discussed previously.)

Cost figures and calculations using an allocator based on a ratio computed from all costs associated with the integrated video dialtone/voice service platform are provided as Attachment C(1). As set forth below, this is a less reasonable method of allocation. Nevertheless, it produces results that are generally similar to the allocation methodology adopted by Bell Atlantic.

The network components presented in the tariff filing represented only that portion of the network necessary to provide video dialtone service. Primary plant components necessary solely for the provision of voice services were not included in the cost development and calculations found in the tariff filing. Thus, in order to compare all dedicated and incremental costs for the network, as requested by the Commission, Bell Atlantic has identified the dedicated voice components that form an appropriate basis for comparison with the end to end video dialtone system. A diagram of the voice network architecture-- from access point to end-user customer-- is also provided in Attachment C(1).

The voice-only network components added to the system include:

- The per line investment associated with the voice switch in the end-user's serving office, corresponding to the ATM edge device in the video dialtone network. (Both represent the point of network interface.) This per line investment is based on the voice switches present in the Dover build central offices. Voice traffic carried from an interexchange carrier over access facilities interfaces with Bell Atlantic's voice network for transport to end-users at the voice switch. Video traffic carried from a programmer-customer over access facilities interfaces with Bell Atlantic's video dialtone network for transport to end-user subscribers at the ATM edge device.

- Transport equipment and facilities from the voice serving wire center's voice switch to the host digital terminal (HDT). The voice portion of the network uses standard interoffice SONET and digital cross connect electronics as terminating equipment from the voice serving office to the VSO HDT location.

There is no reasonable basis for requiring this type of allocation over that used by Bell Atlantic. If Bell Atlantic were to use the proposed methodology, it would increase video dialtone's allocation of shared investment from 28.32% to 31.55%, increasing the cost per channel per potential subscriber by approximately 8%, from $.0354 to $.0382, for broadcast channels. For narrowcast channels, the allocator would increase from 28.32% to 33.36%, increasing the cost per channel per potential subscriber by approximately 11% from $.0589 to $.0655.

In addition, Bell Atlantic's analysis represents a conservative analysis of the end-to-end system that may overstate the allocation to video. For example, the voice-only components involved in the system could also appropriately include that portion of the common channel signalling network used for call set-up and processing. This would be comparable to the video dialtone network's use of signalling facilities and equipment that connect Bell Atlantic's video administration module to programmer-customers' administrative systems and to HDTs. Using this broader definition would increase the allocation to voice and thereby decrease the allocation to video.

C(2) Bell Atlantic must provide cost and rate figures and calculations based on a scheme that allocates 50% of non-incremental shared primary plant costs to video dialtone and 50% to telephony.

Cost and rate figures and calculations based on a scheme that allocates 50% of non-incremental shared primary plant costs to video dialtone and 50% to telephony are provided as Attachment C(2).

For broadcast service, increasing to 50% the allocation to video dialtone of non-incremental shared primary plant costs causes the recurring monthly cost per channel per potential subscriber to increase approximately 46%, from $0.0354 to $0.0516.

For narrowcast service, the increased allocation causes the recurring monthly cost per channel per potential subscriber to increase approximately 44% from $0.0589 to $0.0847.

This 50% allocation methodology has no reasoned basis and results in an allocation that would lead to a requirement for unreasonable prices,[36] driving away existing business and all potential new customers.[37]

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[36] *See* Taylor Direct Case Affidavit.

[37] *See* Rider Declaration.

C(3) We direct Bell Atlantic to include in its direct case its best estimates of the effects on rates and the resulting demand for video dialtone services of increasing the allocation of non-incremental shared primary plant costs to video dialtone along a range from the 28% it has proposed up to and including the 50% allocation proposed by the Joint Petitioners. Bell Atlantic should also show the effects on rates and demand for video dialtone service of using the allocator discussed in (1) above.

Attachment C(3) illustrates how increasing the allocation of non-incremental shared primary plant affects video dialtone service channel costs and demonstrates the effect on rates if Bell Atlantic were to recover the same amount of overhead per rate element as proposed in the tariff filing.

For example, increasing the allocation of shared primary plant costs from 28.32% (as proposed in Bell Atlantic's tariff) to 40% causes a 25% increase in the monthly single channel broadcast cost, from $.0354 to $.0442, and the monthly rate, from $.05 to $.062.

Increasing the allocation of non-incremental shared primary plant has no effect on other video dialtone rate elements because they include no shared primary plant.

The market effect of price increases on demand is described in the Rider Declaration, attached as Exhibit B to the Introduction and Summary.

C(4) Bell Atlantic may submit analysis for any other technique that Bell Atlantic believes would assist the Commission.

While allocation of shared costs is required under Commission cost allocation procedures for costs actually incurred, there should be no such requirement in setting tariff prices. As Dr. Taylor has explained, the incremental cost of the individual service is the appropriate price floor and any additional allocation of shared or overhead costs is economically arbitrary.[38]

Given the requirements of the Video Dialtone Reconsideration Order, however, Bell Atlantic has allocated a fair portion of the shared costs to video dialtone services. Bell Atlantic has proposed a reasonable method for that allocation based on the specific technology deployed. Because the Commission's role in tariff review is determining whether the tariff, as proposed, is not patently unlawful,[39] there is no need to compare other methodologies of cost allocation.

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[38] *See* Taylor Direct Case Affidavit.

[39] See Introduction and Summary.

C(5) Bell Atlantic should also explain why its allocation methodology results in a more reasonable allocation of non-incremental shared primary plant costs than do the other allocation methods.

Any allocation of non-incremental shared costs is economically arbitrary.[40] There can be no "correct" allocation. In fact, ***any*** allocation of these costs to video dialtone service reduces the burden on other services. Consistent with that economic truth, the Commission has not required that a LEC use the "best" allocation methodology. Because of the arbitrary nature of the allocation, no "best" methodology exists. Instead, the Commission requires that the LEC use a method that allocates a "reasonable" amount.[41] Moreover, the Commission reserved its most intense scrutiny only for those tariffs proposing to allocate "an extremely low proportion" of costs -- not the situation here.

The methodology used by Bell Atlantic is reasonable. It uses an allocation that relates to the actual facilities used to provide service. Moreover, the results are generally consistent with several of the other methodologies identified by the Commission. In contrast, a number of other methodologies achieve an unreasonable allocation. For example, a 50/50 allocation is suggested without a reasoned basis. Similarly, a minutes of use allocation relies on a basis that has no relationship to the actual costs or equipment at issue here. Moreover, those methodologies result in an over allocation of costs to video. The result is an impairment of the viability of the service.[42]

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[40] ***See*** Taylor Direct Case Affidavit.

[41] Video Dialtone Reconsideration Order, ¶ 218.

[42] ***See*** Rider Declaration.

If there is reduced demand, then there will be less revenue to support these shared costs, to the detriment of everyone but the incumbent cable operator.[43]

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43 *See* Taylor Reply Brief Affidavit, Attachment A.

C(6) Bell Atlantic may also include any studies that show how an increase in price would affect the demand for video dialtone services, or how each allocator is likely to affect the anticipated overall revenue generated by video dialtone. Such showings could also demonstrate how different allocators may affect the competitiveness of video dialtone with other video services.

As set forth in the Rider Declaration, provided as Exhibit B to the Introduction and Summary, any material price increase for video dialtone service will negatively impact the ability of programmer-customers to compete with the incumbent cable operators. The result is a reduction in demand for video dialtone service and a reduction in overall cost contributions.

D

Issue D: **Has Bell Atlantic identified as direct costs of video dialtone all costs in other accounts (other than primary plant accounts) that are reasonably identifiable as incremental costs of video dialtone service?**

Yes, in its filing, as directed by the Commission's Reconsideration Order, Bell Atlantic included as a direct cost all reasonably identifiable incremental costs of video dialtone including specific categories listed by the Commission. In addition, factors for administrative and maintenance expenses were included in the direct cost. See response to Information Request Pre(4). Detailed descriptions of all these incremental expenses are provided in response to Information Request D(1).

Although other incremental costs were not individually identifiable, Bell Atlantic did include overhead loadings to add coverage for amounts not specifically attributable to video dialtone. For example, Bell Atlantic could not reasonably identify any incremental costs associated with sales and marketing of video dialtone services. Like interexchange carriers, programmer-customers will directly market their services and be the primary point of contact for end-users' complaints and inquiries. As a result, it is unlikely that Bell Atlantic would incur an increase in its own marketing and advertising expenses significantly above that incurred upon introduction of any new telephone access service.

Similarly, Bell Atlantic could not reasonably identify costs associated with product management, legal and other staff functions that are incremental to the Dover Township video dialtone service. Without a prior history of video dialtone service, there is no basis to assume that existing overhead is not sufficient to account for the cost of base functions. The employee-related expenses for these functions represent "costs" not only to the video dialtone service in Dover Township, but to other services, both video dialtone and non-video dialtone. For example, attorneys working on the Dover Township regulatory issues are responsible for numerous other dockets at the Commission as well as filings in other jurisdictions, some or all of which may be video dialtone related. It is not possible to accurately parse these types of employee expenses and apportion them to specific products or services or geographical locations. Moreover, none of these expenses relate to the ongoing legal expenses associated with long run market conditions. These long run costs, which are not known at the time of the initial tariff filing for a service, are the only ones that are properly assignable as a direct cost. It clearly is unreasonable to use start-up expenses for the first commercial video dialtone service, if they were in fact identifiable (which they are not), as a proxy for long-run market conditions. Such expenses were appropriately included in the overhead loadings.

Issue D-Information Request (par. 30-32):

D(1) We direct Bell Atlantic to identify as accurately as possible the video dialtone component of the following direct costs: network operations expenses; network administration expenses; testing expenses (as opposed to component testing which should already be part of component costs); plant operations, administration expenses; engineering expenses; customer operations expenses; and corporate operations expenses.

The direct costs associated with the operation and maintenance (e.g., network operations, testing, administration, and engineering) of the video dialtone network are included by application of annual cost factors for the particular investment components that comprise the network.[44] Other expenses associated with corporate operations which cannot be attributed to the network investment components (e.g., corporate operations expenses) are captured through the application of the overhead loading factor. In addition to the costs attributed to video dialtone through the application of relevant cost factors, certain other expenses identified as incremental to video dialtone are identified as follows:

Network and Plant Operations:

- Incremental costs associated with plant operations can be found in the power and common equipment component that was included as part of the direct investments of each piece of network equipment located in a Bell Atlantic company building.[45]

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[44] Tariff, D&J Workpapers 5-1, 5-2, 5-6, 5-7, 5-11, 5-12..

[45] Tariff, D&J at 3-2, 3-3, 3-7, 3-8, 3-9, 3-10, 3-11, Workpapers 5-3, 5-4, 5-8, 5-9; Amended Tariff at Tabs 2-5.

- Quad current limiter investment, included in the development of direct costs of broadcast and narrowcast channels, provides incremental powering to the integrated system.[46]

Network Administration and Maintenance:

- The Video Administration Module (VAM) component of the video dialtone network is a service specific control tool for administering programmer-customers' channels as well as a maintenance tool that facilitates network diagnosis of trouble reports. Incremental costs associated with network administration and maintenance are covered in the direct investment for the VAM.[47]
- The administration related costs for each network component are developed as a component of operating expense and are based on investment in specific plant categories. This portion of the operating expense recovers costs associated with planning, forecasting, pricing and marketing video dialtone service.[48]

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[46] Tariff, D&J at 3-9

[47] *Id.*, at 3-7, Workpapers 5-3, 5-8; Amended Tariff at Tab 40.

[48] *Id.*, Workpapers 5-1, 5-2, 5-6, 5-7, 5-11, 5-12; Amended Tariff at Tabs 2-5.

Engineering:

- All investment figures for video dialtone network equipment include the costs of engineering, furnishing and installing that equipment.[49]

Customer Service:

- Incremental costs associated with customer services such as negotiation, placement, handling and processing of orders; service provisioning and activation; and administrative set-up are included in the non-recurring charges.[50]

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[49] Bell Atlantic Telephone Cos., Tariff FCC No. 10, Trans. No. 741, Reply of Bell Atlantic at 16, n.51 & Attachment A, Issue #3 (filed March 6, 1995); Amended Tariff at Tabs 2-5.

[50] Tariff, D&J at 3-12, 3-13, Workpapers 5-13 through 5-17; Amended Tariff at Tab 6.

D(2) Bell Atlantic must identify the direct costs for those support functions that utilize time reporting tracking mechanisms and show the effect of allocating cost to video dialtone based on these mechanisms. When costs of support functions cannot be reasonably identified as direct costs of video dialtone or telephony, they should be clearly identified as shared and allocated as overhead.

Those support functions that utilize time reporting tracking mechanisms have been identified in response to Issue D(1). The costs for those support functions are included as direct costs through application of appropriate annual cost factors or as overhead costs through an appropriate loading factor. However, those costs are not based on actual time reporting because time reporting is an historical mechanism, the specific results of which are not known on the prospective basis that is required to develop forward looking rates for a specific product. When video dialtone becomes operational, the time reporting processes will track the costs as incurred.

D(3) Bell Atlantic must provide the costs of the preliminary planning for video dialtone and the development expenses incurred prior to the approval of the Dover Township Section 214 authorization.

Attachment D(3) identifies the expenses associated with preliminary planning for video dialtone service incurred prior to approval of the Dover Township Section 214 authorization in July 1994.

Preliminary expenses reported to the Dover Township/Florham Park fiber-to-the-curb video dialtone project by Bell Atlantic Network Services employees totaled $186,300.30. Expenses were reported in the following accounts:

6534 Plant Operations Administration Expense

6535 Engineering Expense

6611 Product Management

6623 Customer Service

6722 External Relations

6726 Procurement

Preliminary expenses reported by Bell Atlantic-New Jersey employees to the project totaled $62,625.70 and correspond to work reportable to the following accounts:

6611 Product Management

6712 Corporation Operations-Planning

6722 External Relations

6727 Research and Development

6728 Other General and Administration

In addition, planning and development expenses reported by Bell Atlantic-New Jersey employees to general video dialtone projects prior to the Dover 214 approval totaled $1,713.57 in account 6535, Engineering Expense.

D(4) Bell Atlantic must identify those Preliminary planning and development expenses that were incurred only for the Dover Township service and separate them from those that benefit all of Bell Atlantic's video dialtone service offerings.

As outlined below, in response to Issue D(5), expenses reported to video dialtone were not specifically identified as incurred only for the Dover Township build. Planning for Bell Atlantic's two initial fiber-to-the-curb video dialtone builds, in Dover Township and Florham Park New Jersey, proceeded concurrently. Both planned builds utilize identical architectures and are expected to offer identical services. As such, preliminary planning and development costs can not be identified as being incurred only for the Dover Township service. Moreover, any preliminary planning and development expenses incurred to the benefit of the Dover Township and Florham Park projects also benefit Bell Atlantic's future video dialtone projects.

D(5) Of those preliminary expenses that benefit more than just the Dover Township offering, Bell Atlantic should identify the amounts and explain the methodology used to assign a portion of these costs to the Dover Township offering.

As discussed in response to Issue D above, it is unreasonable to require the first video dialtone service in the first geographical area of deployment to bear all of the start-up costs associated with entry into the video dialtone market, if such costs were identifiable (which they are not). Any preliminary expenses incurred to the benefit of the Dover Township and Florham Park projects also benefit Bell Atlantic's future video dialtone projects. For example, development work on these first area applications of switched digital video dialtone has benefitted planning efforts associated with Bell Atlantic's future plans to deploy more technologically advanced switched digital video systems throughout its region.

D(6) To the extent that Bell Atlantic believes that it cannot isolate all video dialtone start-up costs, it should explain in detail how its failure to do so, nonetheless, is consistent with the Commission's direction in the Video Dialtone Reconsideration Order.

Bell Atlantic included as direct costs all reasonably identifiable costs of video dialtone as directed by the Commission's Reconsideration Order. See response to Information Request D(1). Bell Atlantic also included overhead loadings to add additional costs to video dialtone.

Although the Commission suggested categories of expenses that "might" be reasonably identifiable as costs of a particular service,[51] it set no absolute requirements because such a rule would be unworkable expenses that are not "reasonably identifiable" for a particular service. This flexibility is especially appropriate here, where this is the initial offering of a new type of service and there are start-up expenses. See response to Issue D. Start-up costs are appropriately recovered through the overheads cumulatively applied to all services. The Reconsideration Order's requirement to include identifiable shared investment and administrative cost did not amend tariff requirements to project mature market costs, rather than one-time start-up costs.

[51] *See* Video Dialtone Reconsideration Order, ¶219.